

Table F-32. Predicted Maximum Concentrations of Various Constituents at the L-Area Oil and Chemical Basin^{a,b}

Constituent	Applicable standard ^d	Monitoring data maximum mean concentration ^h	PATHRAE-modeled maximum concentration without remedial action ^c					
			No action		No waste removal and closure		Waste removal and closure	
			1-m well	100-m well	1-m well	100-m well	1-m well	100-m well
Cadmium	0.01	(e)	0.03 (1986)	(e)	(e)	(e)	(e)	(e)
Chromium	0.05	(e)	3.3 (2027)	0.098 (2495)	(e)	(e)	(e)	(e)
Nickel	0.013	0.017 (well LCO 1)	0.12 (2098)	(e)	(e)	(e)	(e)	(e)
Lead	0.05	(e)	0.22 (2098)	(e)	(e)	(e)	(e)	(e)
Tetrachloro-ethylene	.0007 ^f	0.056 (well LCO 1)	0.016 (1979)	0.016 (1979)	0.016 (1979)	0.016 (1979)	0.016 (1979)	0.016 (1979)
Americium-241	2.5	(g)	180 (2098)	(e)	5.3 (2211)	(g)	(e)	(g)
Cobalt-60	210	(g)	7300 (1976)	(e)	7300 (1976)	(e)	7300 (1976)	(e)
Plutonium-238	14	(g)	18 (2098)	(e)	(e)	(e)	(e)	(e)
Strontium-90	42	(g)	2100 (1980)	(e)	2100 (1980)	(e)	2100 (1980)	(e)
Tritium	8.7 x 10 ⁴	(g)	4.6 x 10 ⁸ (1962)	3.2 x 10 ⁸ (1967)	4.6 x 10 ⁸ (1962)	3.2 x 10 ⁸ (1967)	4.6 x 10 ⁸ (1962)	3.2 x 10 ⁸ (1967)

Footnotes on last page of table.

Table F-32. Predicted Maximum Concentrations of Various Constituents at the L-Area Oil and Chemical Basin for the Three Closure Options^{a,b} (continued)

			PATHRAE-modeled maximum concentration without remedial action ^c						TE
Constituent	Applicable standard ^d	Monitoring data maximum mean concentration ^h	No action		No waste removal and closure		Waste removal and closure		
			1-m well	100-m well	1-m well	100-m well	1-m well	100-m well	
Uranium-238	24	(g)	130 (2027)	(e)	(e)	(e)	(e)	(e)	
Yttrium-90	550	(g)	2100 (1980)	(e)	2100 (1980)	(e)	2100 (1980)	(e)	

^aSource: Adapted from Pekkala, Jewell, Price, and Bledsoe, 1987.

^bConcentrations are in milligrams per liter for chemicals and picocuries per liter for radionuclides.

^cYear of maximum concentration is in parentheses.

^dMCLs for chemicals are given in EPA, 1985b; Health based standard for nickel found in EPA, 1986; for radionuclides, ICRP Publication 30 (ICRP, 1979) methodology was used to determine concentrations that yield annual effective whole-body dose of 4 millirem.

^eBelow applicable standard.

^fEPA, 1985a.

^gNot reported.

^hData are for LCO series water-table monitoring wells. The concentration level provided for nickel is a maximum single well mean. Value listed for tetrachloroethylene was reported as TOH.